

**Amendments to the Claims:**

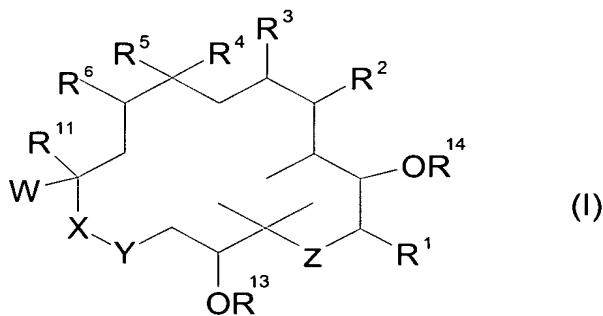
The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Canceled)

15. (Currently Amended) ~~Method of treatment of a disease involving a neuronal connectivity defect~~ A method of treating schizophrenia in a human patient, comprising administering to an individual in need thereof the patient a therapeutic effective amount of an epothilone or pharmaceutically acceptable salt thereof.

16. (Canceled)

17. (Previously Presented) Method according to claim 15, wherein the epothilone is a compound of formula (I) or a pharmaceutically acceptable salt thereof:



wherein:

$R^1$  represents H, alkyl, alkenyl or alkynyl in  $C_1$ - $C_6$ , aryl in  $C_6$ - $C_{10}$ , or aralkyl in  $C_7$ - $C_{15}$ ,

$R^2$ ,  $R^3$  each represents H or form together a  $C=C$  double bond,

$R^4$  represents H, a  $C_1$ - $C_6$ -alkyl, or a fluoro substituted  $C_1$ - $C_6$  alkyl,

$R^5$  and  $R^6$  form a  $C=C$  double bond or a three-member ring including O, S,  $NR^7$ , or  $CR^8R^9$  where:

$R^7$  is  $C(O)R^{10}$  or  $SO_2R^{10}$ , and

$R^8$ ,  $R^9$ , and  $R^{10}$  each independently represent H, a halogen, a  $C_1$ - $C_6$  alkyl, a  $C_6$ - $C_{10}$  aryl, or a  $C_7$ - $C_{15}$  alkaryl,

$R^{11}$  represents H, a  $C_1$ - $C_6$  alkyl, a  $C_6$ - $C_{10}$  aryl, or a  $C_7$ - $C_{15}$  alkaryl,

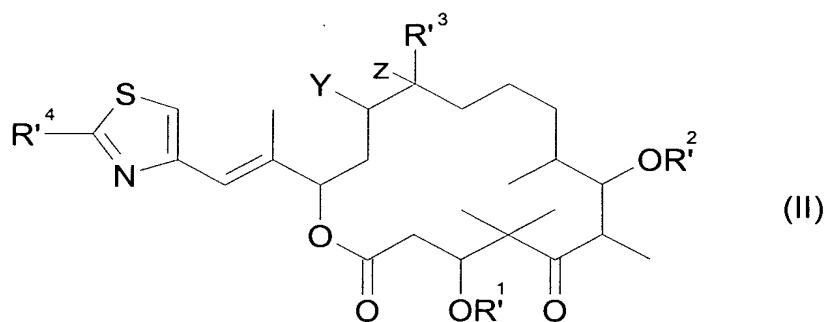
W represents  $C(R^{12})=CH$ ,  $C(R^{12})=C(CH_3)$ ,  $C(R^{12})=CF$  or a bicyclic aromatic/heteroaromatic radical, with  $R^{12}$  representing a heteroaromatic radical,

X-Y represents  $O-C(=O)$ ,  $O-CH_2$ ,  $CH_2-O$ , or  $CH_2-C(=O)$ ,

Z represents  $C=O$ , S,  $S=O$ , or  $SO_2$ , and

$R^{13}$  and  $R^{14}$  represents independently from each other H,  $C_1$ - $C_6$ -alkyl,  $(CO)R^{15}$ , or  $C_{1-4}$ -trialkylsilyl, with  $R^{15}$  being H, a  $C_1$ - $C_6$ -alkyl, or a fluoro substituted  $C_1$ - $C_6$ -alkyl.

18. (Previously Presented) Method according to claim 15, wherein the epothilone is a compound of following formula (II) or a pharmaceutically acceptable salt thereof:



wherein:

$R'^4$  represents a  $C_1$ - $C_6$  alkyl or substituted  $C_1$ - $C_6$  alkyl with substituents selected from the group consisting of F, Cl, Br, I,  $-NCO$ ,  $-NCS$ ,  $-N_3$ ,  $NH_2$ , OH,  $O-(C_1-C_6)$ -acyl,  $O-(C_1-C_6)$ -alkyl, and O-benzoyl,

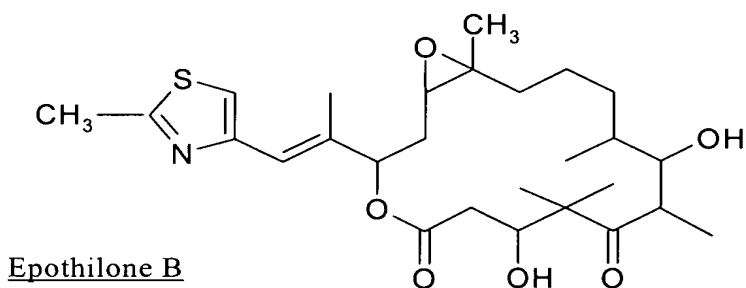
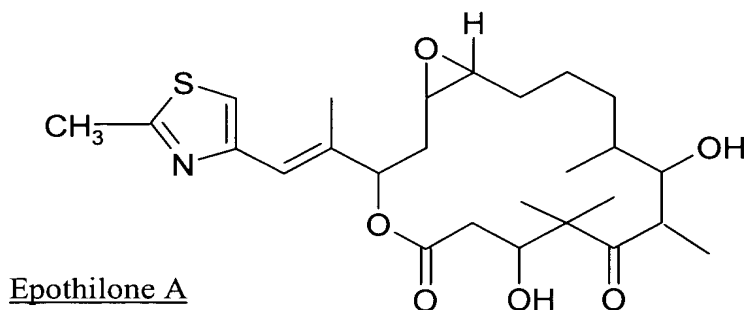
$R'^1$  and  $R'^2$  are independently from each other H, a  $C_1$ - $C_6$ -alkyl,  $(CO)R'^5$  with  $R'^5$  being H, a  $C_1$ - $C_6$ -alkyl, a  $C_1$ - $C_6$ -fluoroalkyl, or a  $C_{1-4}$ -trialkylsilyl,

$R'^3$  represents H,  $C_1$ - $C_6$ -alkyl, or a halogen substituted  $C_1$ - $C_6$ -alkyl, and

Y and Z form either a  $C=C$  double bond or are an O atom of an epoxide.

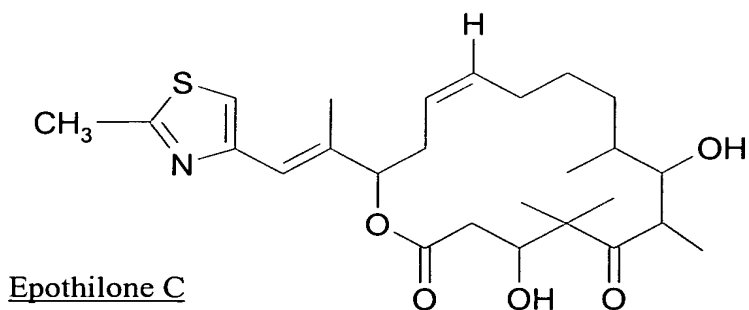
19. (Previously Presented) Method according to claim 18, wherein  $R^{1'}$ ,  $R^{2'}$ , and  $R^{3'}$  represents independently from each other, H, a  $C_1$ - $C_6$ -alkyl, or a  $C_1$ - $C_6$  fluoroalkyl.

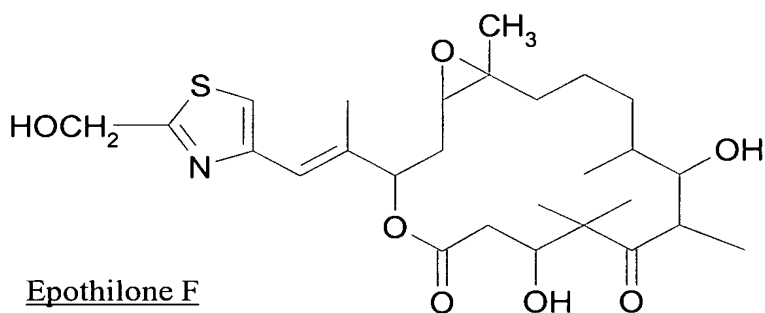
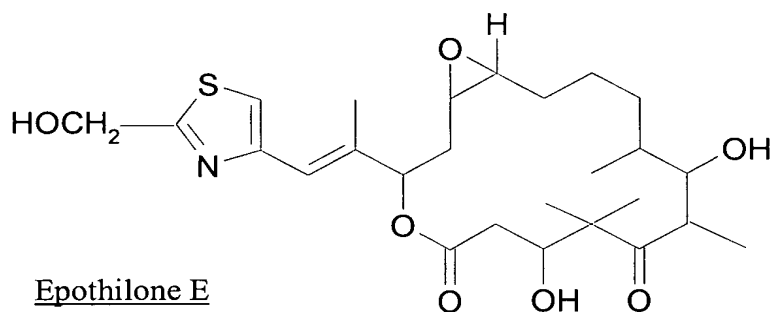
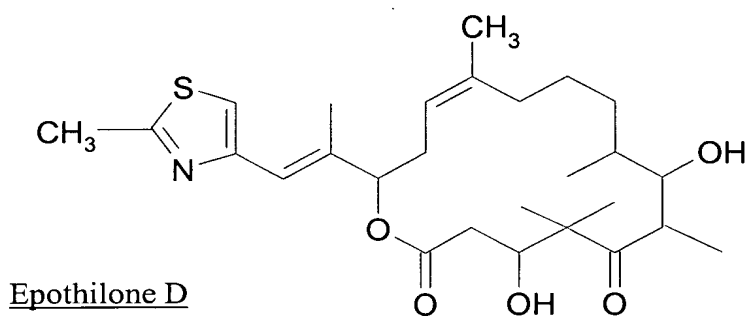
20. (Previously Presented) Method according to claim 15, wherein epothilone is at least a natural epothilone A or B represented by the following structural formulas:



or a pharmaceutically acceptable salt thereof.

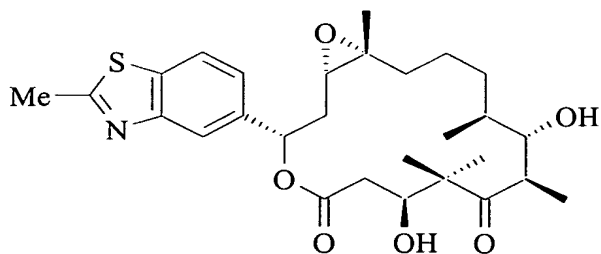
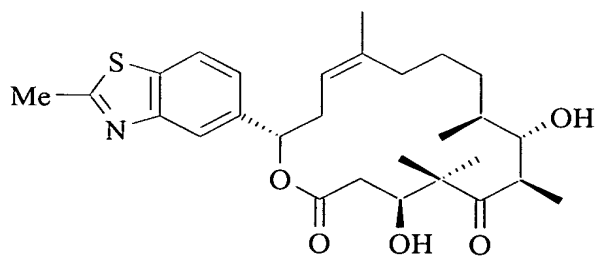
21. (Previously Presented) Method according to claim 15, wherein epothilone is at least one synthetic epothilone C, D, E or F represented by the following structural formulas:

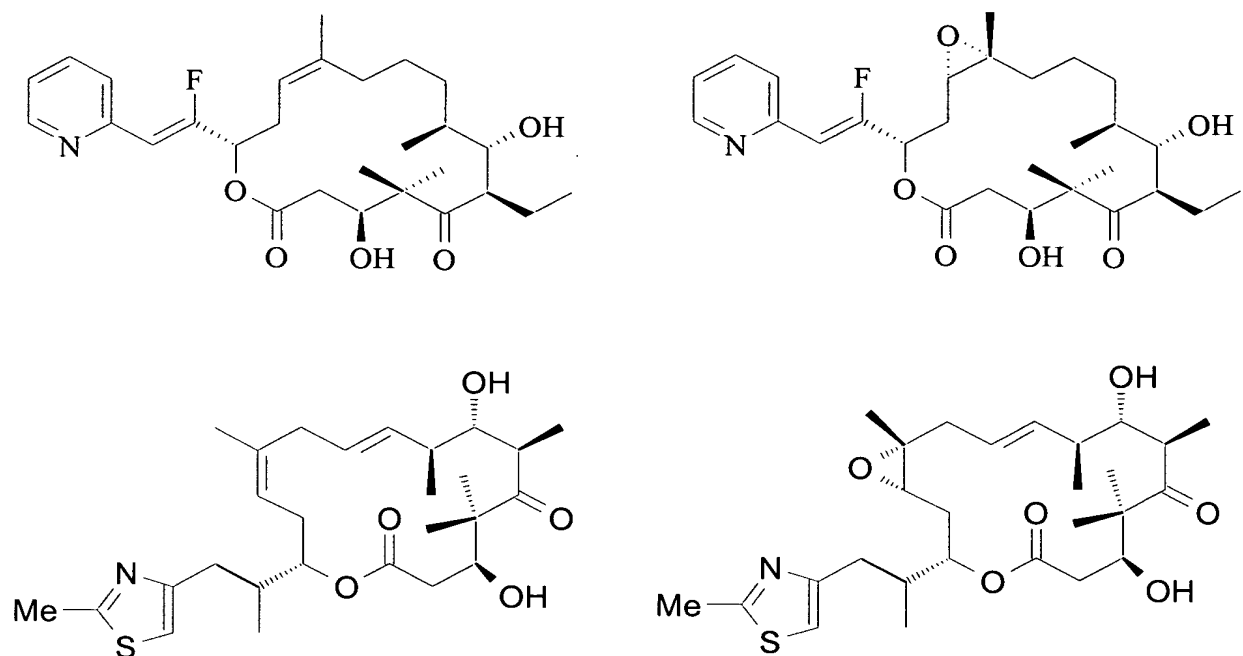




and pharmaceutically acceptable salts thereof.

22. (Previously Presented) Method according to claim 15, wherein epothilone is at least one synthetic epothilone represented by the following structural formulas:





23. (Previously Presented) Method according to any claim 15, wherein the epothilone or pharmaceutically acceptable salt thereof is used at a therapeutically effective amount from 0.01 mg/Kg/dose to 100 mg/Kg/dose.
24. (Currently Amended) Method according to claim 15, wherein the epothilone ~~or pharmaceutically or pharmaceutically~~ acceptable salt thereof is administered in a pharmaceutical composition comprising at least a pharmaceutically acceptable carrier.
25. (Previously Presented) Method according to claim 15, wherein the epothilone is synthetic epothilone D or a pharmaceutical salt thereof.
26. (Previously Presented) Method according to claim 17, wherein  $R^4$  represents  $CH_3$ ,  $CF_3$ , or  $CFH_2$ .
27. (Previously Presented) Method according to claim 17, wherein  $R^{11}$  represents H.
28. (Previously Presented) Method according to claim 26, wherein  $R^{11}$  represents H.

29. (Previously Presented) Method according to claim 17, wherein W represents a 2-methylbenzothiazol-5-yl radical, a 2-methylbenzoxazol-5-yl radical, or a quinolin-7-yl radical.

30. (Previously Presented) Method according to claim 26, wherein W represents a 2-methylbenzothiazol-5-yl radical, a 2-methylbenzoxazol-5-yl radical, or a quinolin-7-yl radical.

31. (Previously Presented) Method according to claim 27, wherein W represents a 2-methylbenzothiazol-5-yl radical, a 2-methylbenzoxazol-5-yl radical, or a quinolin-7-yl radical.

32. (Previously Presented) Method according to claim 28, wherein W represents a 2-methylbenzothiazol-5-yl radical, a 2-methylbenzoxazol-5-yl radical, or a quinolin-7-yl radical.

33. (Previously Presented) Method according to claim 17, wherein W represents  $C(R^{12})=CH$ ,  $C(R^{12})=C(CH_3)$ , or  $C(R^{12})=CF$ , where  $R^{12}$  represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

$C_1-C_6$  alkyl,

CN,

$N_3$ ,

S- $C_1-C_4$ -alkyl,

O- $C_1-C_6$ -alkyl, or

$C_1-C_6$ -alkyl substituted by OH, amino, halogen,  $-NCO$ ,  $-NCS$ ,  $-N_3$ , O- $(C_1-C_6)$ -acyl, O- $(C_1-C_6)$ -alkyl, or O-benzoyl.

34. (Previously Presented) Method according to claim 26, wherein W represents  $C(R^{12})=CH$ ,  $C(R^{12})=C(CH_3)$ , or  $C(R^{12})=CF$ , where  $R^{12}$  represents a 2-pyridinyl, a 2-

substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

C<sub>1</sub>-C<sub>6</sub> alkyl,

CN,

N<sub>3</sub>,

S-C<sub>1</sub>-C<sub>4</sub>-alkyl,

O-C<sub>1</sub>-C<sub>6</sub>-alkyl, or

C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by OH, amino, halogen, -NCO, -NCS, -N<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or O-benzoyl.

35. (Previously Presented) Method according to claim 27, wherein W represents C(R<sup>12</sup>)=CH, C(R<sup>12</sup>)=C(CH<sub>3</sub>), or C(R<sup>12</sup>)=CF, where R<sup>12</sup> represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

C<sub>1</sub>-C<sub>6</sub> alkyl,

CN,

N<sub>3</sub>,

S-C<sub>1</sub>-C<sub>4</sub>-alkyl,

O-C<sub>1</sub>-C<sub>6</sub>-alkyl, or

C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by OH, amino, halogen, -NCO, -NCS, -N<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or O-benzoyl.

36. (Previously Presented) Method according to claim 28, wherein W represents C(R<sup>12</sup>)=CH, C(R<sup>12</sup>)=C(CH<sub>3</sub>), or C(R<sup>12</sup>)=CF, where R<sup>12</sup> represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

C<sub>1</sub>-C<sub>6</sub> alkyl,

CN,  
 N<sub>3</sub>,  
 S-C<sub>1</sub>-C<sub>4</sub>-alkyl,  
 O-C<sub>1</sub>-C<sub>6</sub>-alkyl, or  
 C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by OH, amino, halogen, -NCO, -NCS,  
 -N<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or O-benzoyl.

37. (Previously Presented) Method according to claim 17, wherein W represents C(R<sup>12</sup>)=CH, C(R<sup>12</sup>)=C(CH<sub>3</sub>), or C(R<sup>12</sup>)=CF, where R<sup>12</sup> represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

C<sub>1</sub>-C<sub>6</sub> alkyl,  
 CN,  
 N<sub>3</sub>,  
 S-C<sub>1</sub>-C<sub>4</sub>-alkyl,  
 O-C<sub>1</sub>-C<sub>6</sub>-alkyl, or  
 C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by OH, amino, halogen, -NCO, -NCS,  
 -N<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or O-benzoyl.

38. (Previously Presented) Method according to claim 19, wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> each represents independently from each other H, CH<sub>3</sub>, or CF<sub>3</sub>.